



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/823,350

04/12/2004

Ming-Chiang Tsai

4726

25859

7590

09/27/2005

WEI TE CHUNG

FOXCONN INTERNATIONAL, INC.

1650 MEMOREX DRIVE

SANTA CLARA, CA 95050

EXAMINER

SUTHAR, RISHI S

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/823,350

Applicant(s)

TSAI, MING-CHIANG

Examiner

Rishi Suthar

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20040412</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 does not further limit the structural details of the lens holder of claim 10.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 10, 11, 18-20 rejected under 35 U.S.C. 102(b) as being anticipated by Isaki (Japan Patent No. JP 62187808 A).

Regarding claim 1, Isaki teaches a lens assembly which allows for back focus adjustment and a lens barrel movable in an optical axis direction. It is well known in the art that cameras use lens assemblies which possess these features. The lens assembly of Isaka comprises a lens holder (36); and a plurality of lenses (21-23) received in the lens holder; wherein the lens holder is split into two halves along its longitudinal axis, a plurality of partition platforms are formed inside both halves to define at least one room

Art Unit: 2851

for accommodating and securing the plurality of lenses, and an opening formed through each partition platform, as seen in Fig. 4.

Regarding claim 2, Isaki teaches in Fig. 4 that each half of the lens holder has a top portion and a bottom portion, and the partition platforms are parallel to both the top portion and the bottom portion.

Regarding claim 3, Isaki teaches in Fig. 1 and 4 a circular cutout is defined through the top portion.

Regarding claim 4, Isaki teaches in Fig. 1 and 4 an opening is defined through the bottom portion.

Regarding claim 5, Isaki teaches in Fig. 1 and 4 the openings of the partition platforms are aligned with the openings of the top and bottom portion.

Regarding claim 10, Isaki teaches in Fig. 1 and 4 a first housing half (bottom half 20 in Fig. 4) having a first plurality of partition platforms; a second housing half (top half 20 in Fig. 4) being complementary to the first housing half, the second housing half having a second plurality of partition platforms; wherein when the first housing half is assembled with the second housing half to form a complete housing (36), the partition platforms of each half together define a plurality of rooms inside said complete housing for receiving a plurality of lenses and define openings for passage of light, as shown in Fig. 1.

Regarding claim 11, Isaki teaches each housing halves comprises a top portion, a bottom portion, and a semi-cylindrical wall extending therebetween, with a joining edge, as shown in Fig. 4.

Regarding claim 18, Isaki teaches in Fig. 4 a lens assembly comprising a lens holder (36) defining a through hole along an axial direction thereof; a plurality of lenses (21-23) received in said lens holder; said lens holder including top half (20) and bottom half (20) assembled to each other, said first part defining at least one partition thereof and defining at least one lateral opening exposed to an exterior before said second part is assembled to first part; wherein a lens (21) is inserted into a cavity derived from said partition from the exterior through said lateral opening before said second part is assembled to the first part, and successively said lateral opening and said lens are hidden from the exterior after the second part is assembled to the first part.

Regarding claim 19, Isaki teaches in Fig. 4 the first part and second part are assembled in a lateral direction perpendicular to the axial direction.

Regarding claim 20, Isaki teaches in Fig. 4 that the first part and second part are dimensioned and configured similar to each other.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaki (Japan Patent No. JP 62187808 A) in view of Tichenor et al. (U.S. Patent No. 4,187,534).

Art Unit: 2851

Regarding claim 7, 8, and 12, Isaki teaches the invention as claimed above, except a plurality of mounting pins formed on one of the two halves and a plurality of mounting holes on the other half. Tichenor et al. teaches in Fig. 2 and Fig. 3 a plurality of mounting holes at the edge of the semi-cylindrical lens holder and mounting pins (screws 38) defined in the other of two halves (Col. 2, lines 33-35) and these two halves are secured together when the mounting pins are inserted into the mounting holes. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens holder of Isaki with the hole and pin fastening method of Tichenor et al. to allow for easy changing of the lens components inside the lens holder.

6. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaki (Japan Patent No. JP 62187808 A) in view of Feng (U.S. Patent No. 5,920,061).

Regarding claim 6, Isaki teaches the invention as claimed above except a plurality of screw threads on the outside surface of the semi-cylindrical walls. Feng teaches a lens holder assembly (43) which has screw threads (57b) on the exterior surface of the lens assembly. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens holder of Isaki to include screw threads on the outside for mounting since it is well known in the art to do so.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaki (Japan Patent No. JP 62187808 A) in view of Belliveau et al. (U.S. Patent No. 6,172,822).

Isaki teaches the invention as claimed above, except a funnel-shaped opening in the top portion of the lens holder. Belliveau et al. teaches a funnel-shaped opening when two halves of a lens assembly are assembled with each other in Fig. 4. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens holder of Isaki to include a funnel-shaped opening in the top portion as taught by Belliveau et al. since it is a natural design to bevel the front edge to clear the optical path for wide angle viewing as is well known in the art.

8. Claims 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isaki (Japan Patent No. JP 62187808 A) in view of Tichenor et al. (U.S. Patent No. 4,187,534) as applied to claim 12 above, and further in view of Feng (U.S. Patent No. 5,920,061).

Isaki and Tichenor et al. teach the invention as claimed above and Isaki also teaches that the top and bottom halves have a semi-circular opening therethrough in Fig. 4 and that each partition platform has a semi-circular opening which is aligned with the semi-circular openings through the top and bottom portions. Isaki and Tichenor et al. do not teach a plurality of screw threads on the outside surface of the semi-cylindrical walls. Feng teaches a lens holder assembly (43) which has screw threads (57b) on the exterior surface of the lens assembly. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens holder of Isaki and Tichenor et al. to include screw threads on the outside for mounting since it is well known in the art to do so.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaki (Japan Patent No. JP 62187808 A) in view of Tichenor et al. (U.S. Patent No. 4,187,534) further in view of Feng (U.S. Patent No. 5,920,061) as applied to claim 14 above, and further considered with Belliveau et al. (U.S. Patent No. 6,172,822).

Isaki, Tichenor et al. and Feng teach the invention as claimed above, except for a funnel-shaped opening in the top portion of the lens holder. Belliveau et al. teaches a funnel-shaped opening when two halves of a lens assembly are assembled with each other in Fig. 4. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the lens holder of Isaki, Tichenor et al. and Feng to include a funnel-shaped opening in the top portion as taught by Belliveau et al. since it is a natural design to bevel the front edge to clear the optical path for wide angle viewing as is well known in the art.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaka (Japan Patent No. JP 62187808 A) in view of Miyake et al. (U.S. Patent Application Publication No. US 2002/0065102 A1).

Isaka teaches the invention as described in claim 10 above, but does not teach that the camera is a digital camera which is built on a mobile phone. Miyake et al. teaches a digital camera built on a mobile phone. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to place the lens holder



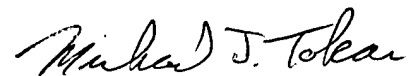
Art Unit: 2851

assembly of Isaka into the mobile phone of Miyake et al. since it is well known in the art to provide mobile phones with digital cameras.

### ***Conclusion***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS



**Michael Tokar**  
Supervisory Patent Examiner  
Technology Center 2800